

# Work Order ID 84264

May-08-12 3:56:25 PM

shp May 17

\*84264\*

Page 1

Item ID: D4541-5

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket

Start Date: 08/05/2012 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 22/05/2012 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/08

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr             |                      |         |        |              |               |               |                  |                |
| D4541                          | C                        |                      |         |        |              |               |               |                  |                |
| 100                            |                          | 0.00                 |         |        |              |               |               |                  |                |
| *100*                          |                          |                      |         |        |              |               |               |                  |                |
| Waterjet                       |                          | 0.00                 |         |        |              |               |               |                  |                |
| FLOW CNC Waterjet              |                          |                      |         |        |              |               |               |                  |                |
| 6061 .032                      |                          |                      |         |        |              |               |               |                  |                |
|                                | Memo                     |                      |         |        |              |               |               |                  |                |
|                                | 1- Cut as per dwg        |                      |         |        |              |               |               |                  |                |
|                                | Prog rev: <u>E</u>       |                      |         |        |              |               |               |                  |                |
|                                | Dwg rev: <u>E</u>        |                      |         |        |              |               |               |                  |                |
|                                | 2- Deburr                |                      |         |        |              |               |               |                  |                |
| 110                            |                          | 0.00                 |         |        |              |               |               |                  |                |
| *110*                          |                          |                      |         |        |              |               |               |                  |                |
| QC                             |                          | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |                          |                      |         |        |              |               |               |                  |                |

B12-5-10

B12-5-10

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Work Order ID 84264

\*84264\*

Page 2

May-08-12 3:56:25 PM

Item ID: D4541-5

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket

Start Date: 08/05/2012 Start Qty: 2.00 \*2\*

Cust Item ID:

Required Date: 22/05/2012 Req'd Qty: 2.00 \*2\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

| Sequence ID/<br>Work Center ID         | Operation<br>Description                                  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120<br>*120*<br>QC<br>Quality Control  | QC8- Inspect parts - second check<br><br>Memo             | 0.00<br><br>0.00     |         |        |              | (4)           |               |                  | 12.05.10       |
| 125<br>*125*<br>Small Fab<br>Small Fab | <br><br>Memo<br>BEND TABS PER DWG                         | 0.00<br><br>0.00     |         |        |              | (4)           |               |                  | 12.05.14       |
| 127<br>*127*<br>QC<br>Quality Control  | QC5- Inspect part completeness to step on W/O<br><br>Memo | 0.00<br><br>0.00     |         |        |              | (4)           |               |                  | 12.05.14       |

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 84264

**\*84264\***

Page 3

May-08-12 3:56:25 PM

Item ID: D4541-5      Accept      **\*N900040100\***      Setup Start **\*NS1\***  
 Revision ID:      Stop **\*NS2\***  
 Item Name: Bracket  
 Start Date: 08/05/2012      Start Qty: 2.00      **\*2\***      Cust Item ID:  
 Required Date: 22/05/2012      Req'd Qty: 2.00      **\*2\***      Customer:  
 Reference:

Approvals:      Process Plan:      Date:      Tooling:      Date:      Run Start **\*NR1\***  
 QC:      Date:      SPC (Y/N):      Date:      Stop **\*NR2\***

| Sequence ID/<br>Work Center ID                | Operation<br>Description                                     | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp                              |
|---|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|---|
| 150<br><b>*150*</b><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: <u>114</u><br><br>Memo | 0.00<br><br>0.00     |         |        |              | <u>4</u>      |               | <u>50</u>        | <u>12-5-14</u>                              |
| 160<br><b>*160*</b><br>QC<br>Quality Control  | QC21- Final Inspection - Work Order Release<br><br>Memo      | 0.00<br><br>0.00     |         |        |              |               |               |                  | <u>12/5/15</u> <u>MF</u><br><u>12-05-15</u> |

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

May-08-12 3:56:29 PM

Page 1

Work Order ID: 84264

**\*84264\***

Parent Item: D4541-5

**\*D4541-5\***

Parent Item Name: Bracket

Start Date: 08/05/2012

Required Date: 22/05/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP revA 12.01.04 New Issue EC verified by:DD IPP REV:B  
12.02.24 as per dwg revb DD verf:EC IPP REV:C 12.05.08 as  
per dwg revC DD verf:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M6061T6S.032                    |                        | Purchased     | No          |                     |                  | 100             | sf                 | 302.7160       | 0.204       | 0.429474     |               |                |        |

**\*M6061T6S 032\***

6061-T6 Sheet 0.032"

**\*\***

B12-5-10

Location

Loc Qty

Loc Code

MAT021

302.716

118106

48.606

120218

33.77

120285

42.24

121099

178.1

120218

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 84264 MJS  
12/05/08

**DETAIL A**  
TYP TAB DETAIL  
SCALE 8X

**D4541-1 BRACKET**

RELEASE  
2012-05-07

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.12 lbs
- 8) PROFILE PER DRAWING FILE "D4541-1-REVC.DXF"

| C   | D4541-5F WAS -5; ADD -5F-6; RMV FINISH (-11-2/-3/-5F1-7);<br>0.70 WAS 0.60 (ZN D1-3) | CP | 12.04.20 |
|---|--|----|----------|
| B   | -5; 1.55 WAS 1.45 (ZN C4-4)  | CP | 12.02.01 |
| A   | NEW ISSUE  | CP | 12.01.09 |
| REV.  | DESCRIPTION  | BY | DATE     |
| DESIGN  |  |    |          |
| DRAWN   |  |    |          |
| CHECKED   |  |    |          |
| MFG. APPR.  |  |    |          |
| APPROVED  |  |    |          |
| DE APPR.  |  |    |          |
| DATE  | 12.04.20   |    |          |
| <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA<br>DRAWING NO. <b>D4541</b><br>TITLE <b>BRACKET</b><br>REV. C<br>SHEET 1 OF 7<br>SCALE<br>NTS<br><small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |  |    |          |

**Dart Aerospace Ltd**

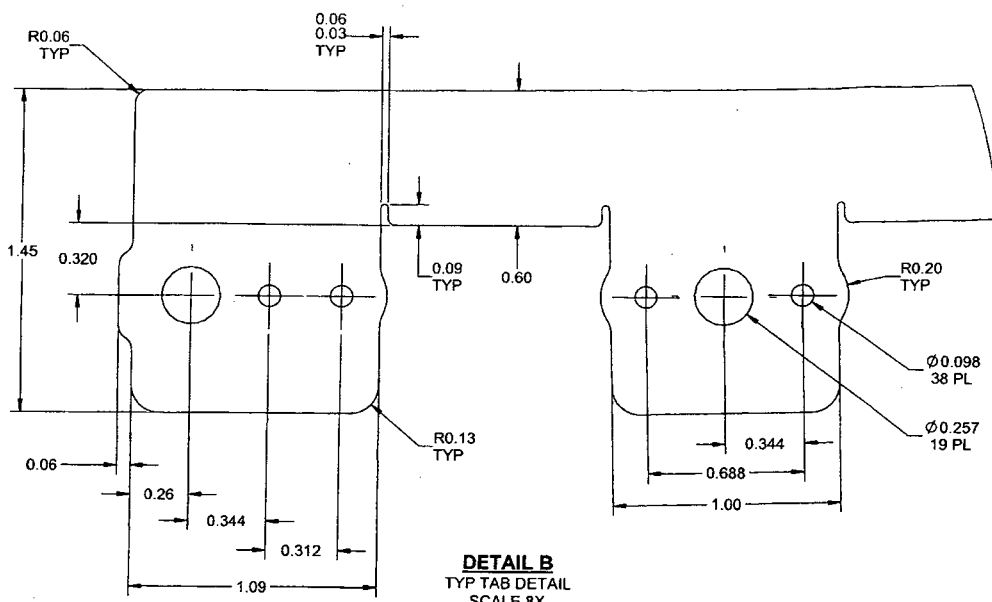
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

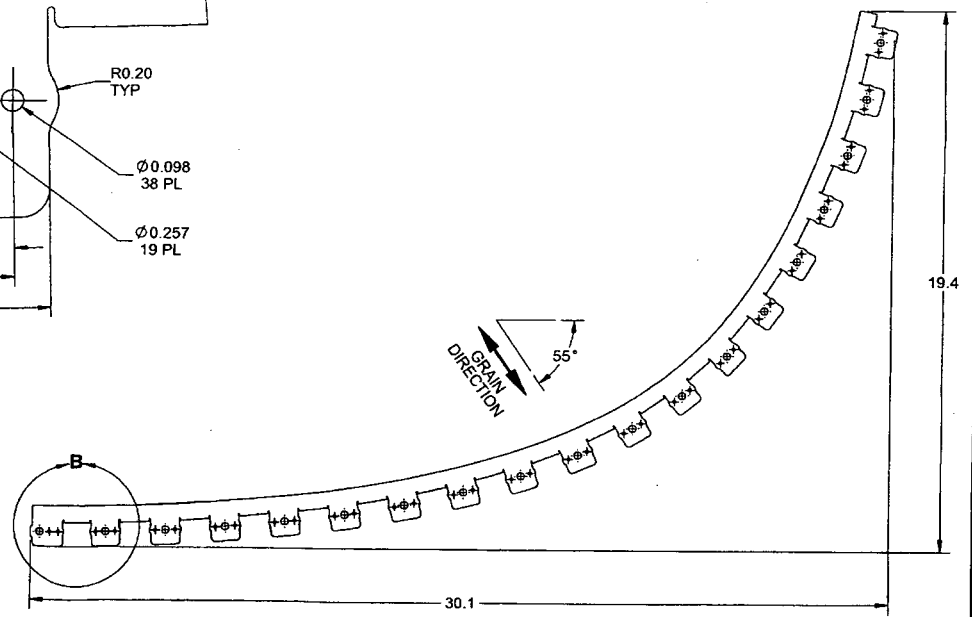
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

84264









**DETAIL B**  
TYP TAB DETAIL  
SCALE 8X



**D4541-2 BRACKET**

**RELEASED**  
2012-05-07

- NOTES:**
- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.12 lbs
  - 8) PROFILE PER DRAWING FILE "D4541-2-REVC.DXF"

|            |   |  |              |
|------------|---|--|--------------|
| DESIGN     |  | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |  | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    |  | DRAWING NO.  | REV. C       |
| MFG. APPR. |  | D4541  | SHEET 2 OF 7 |
| APPROVED   |  | TITLE  | SCALE        |
| DE APPR.   |  | BRACKET  | NTS          |
| DATE       | 12.02.20  | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

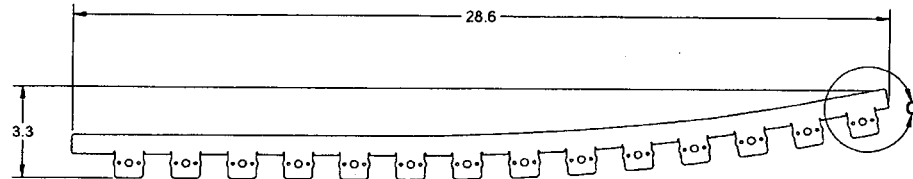
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

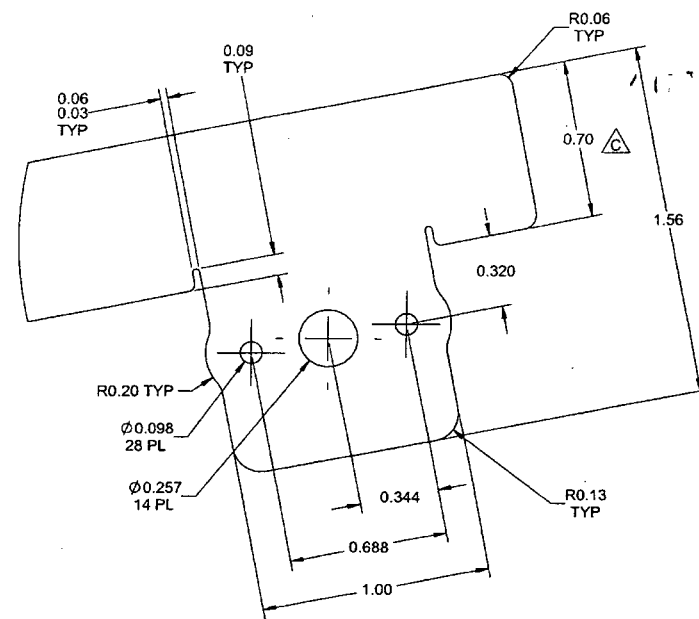
**NOTE:** Date & initial all entries

84264



**D4541-3 BRACKET**

GRAIN  
DIRECTION



**DETAIL C**  
TYP TAB DETAIL  
SCALE 4X

RELEASED  
2012-05-07  
JMP

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.09 lbs
- 8) PROFILE PER DRAWING FILE "D4541-3-REVC.DXF"

|            |          |   |              |
|------------|----------|---|--------------|
| DESIGN     | JP       | <b>DART AEROSPACE LTD</b>   |              |
| DRAWN      | JP       | HAWKESBURY, ONTARIO, CANADA   |              |
| CHECKED    | ASS      | DRAWING NO. <b>D4541</b>  | REV. C       |
| MFG. APPR. |          |   | SHEET 3 OF 7 |
| APPROVED   | JMP      | TITLE <b>BRACKET</b>  | SCALE        |
| DE APPR.   |          |   | NTS          |
| DATE       | 12.02.20 | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPOSE OR RECOMBINATION TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small> |              |

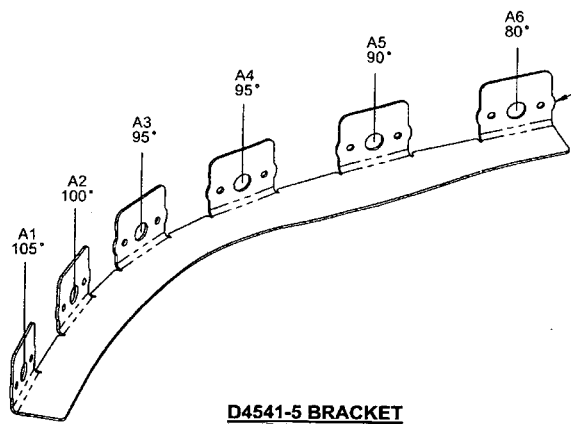
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

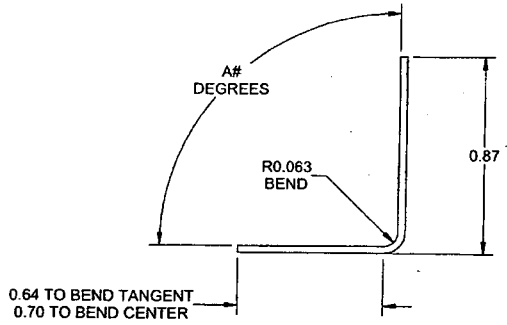
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action<br>Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

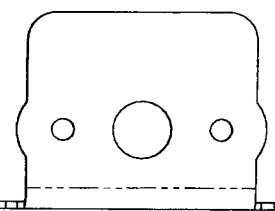
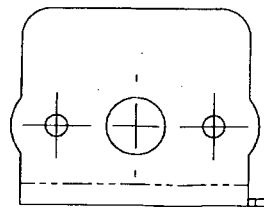


**D4541-5 BRACKET**  
(MAKE FROM D4541-5F)

84264



**DETAIL D**  
BEND DETAIL  
SCALE 2X



RELEASED  
2012-05-07

- NOTES:**
- 1) MATERIAL: MAKE FROM D4541-5F
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: DART P/N & B/N PER DART QSI 044 6.1
  - 7) WEIGHT: 0.04 lbs

|            |          |  |              |
|------------|----------|--|--------------|
| DESIGN     |          | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |          | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    | AS       | DRAWING NO.  | REV. C       |
| MFG. APPR. |          | <b>D4541</b>   | SHEET 4 OF 7 |
| APPROVED   |          | TITLE  | SCALE        |
| DE APPR.   |          | <b>BRACKET</b>   | NTS          |
| DATE       | 12.02.20 | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

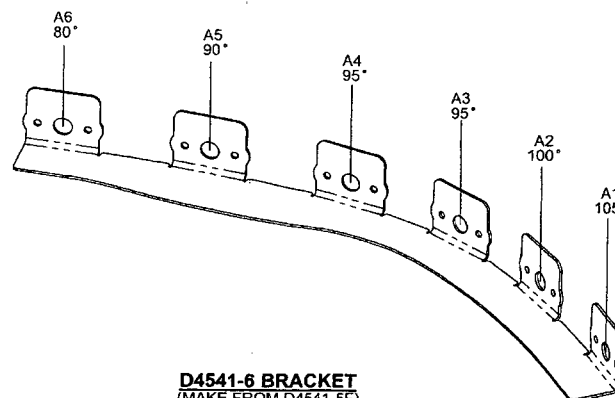
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

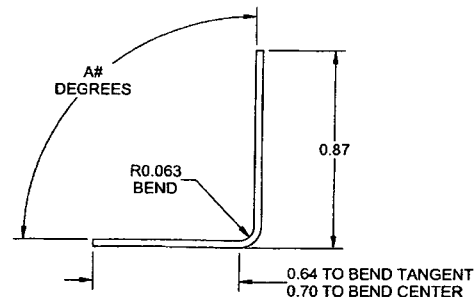
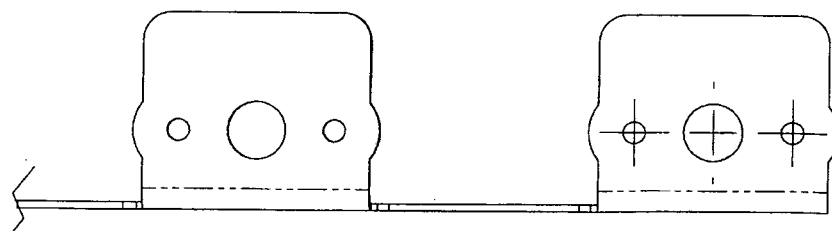
**NOTE:** Date & initial all entries



84264



**D4541-6 BRACKET**  
(MAKE FROM D4541-5F)



**DETAIL E**  
BEND DETAIL  
SCALE 2X

**NOTES:**

- 1) MATERIAL: MAKE FROM D4541-5F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: DART P/N & B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

RELEASED  
2012-05-07

|            |          |  |              |
|------------|----------|--|--------------|
| DESIGN     |          | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |          | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    | ASS      | DRAWING NO.  | REV. C       |
| MFG. APPR. |          | D4541  | SHEET 5 OF 7 |
| APPROVED   |          | TITLE  | SCALE        |
| DE APPR.   |          | BRACKET  | NTS          |
| DATE       | 12.02.20 | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

# Dart Aerospace Ltd

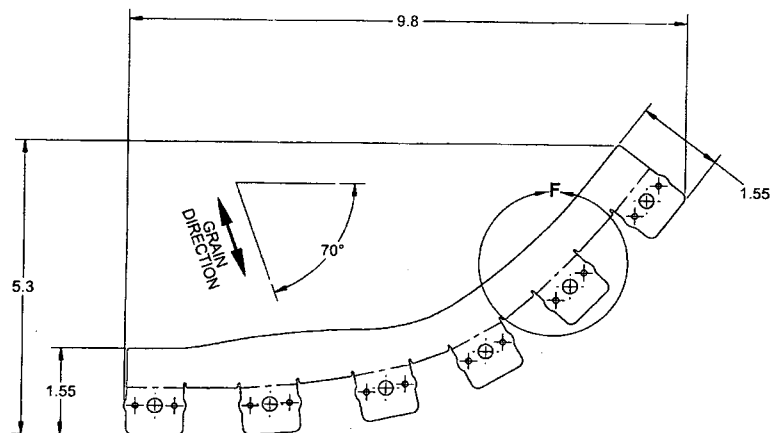
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

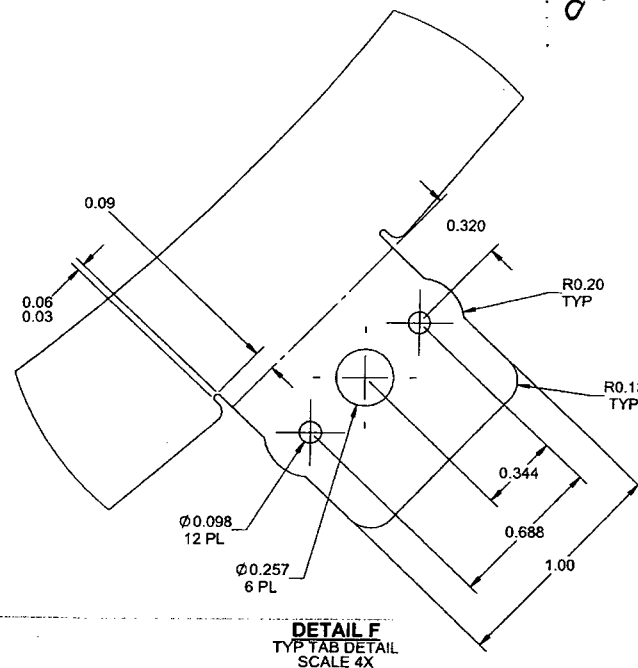
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



**D4541-5F FLAT PATTERN**



**DETAIL F**  
TYP TAB DETAIL  
SCALE 4X

RELEASE  
2012-05-07  
AM

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.04 lbs
- 8) PROFILE PER DRAWING FILE "D4541-5-REV.C.DXF"

|  |           |  |              |
|--|-----------|--|--------------|
| DESIGN   | <i>g</i>  | <b>DART AEROSPACE LTD</b>              |              |
| DRAWN  | <i>g</i>  | HAWKESBURY, ONTARIO, CANADA            |              |
| CHECKED  | <i>AS</i> | DRAWING NO.                            | REV. C       |
| MFG. APPR.   | <i>AS</i> | <b>D4541</b>                           | SHEET 6 OF 7 |
| APPROVED   | <i>AS</i> | TITLE                                  | SCALE        |
| DE APPR.   | <i>AS</i> | <b>BRACKET</b>                         | NTS          |
| DATE   | 12.04.20  | COPYRIGHT © 2012 BY DART AEROSPACE LTD |              |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |           |  |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

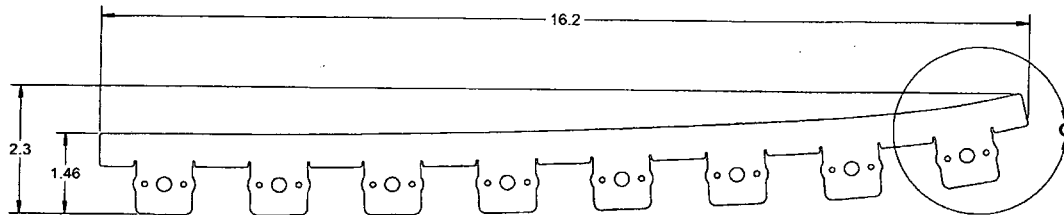
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

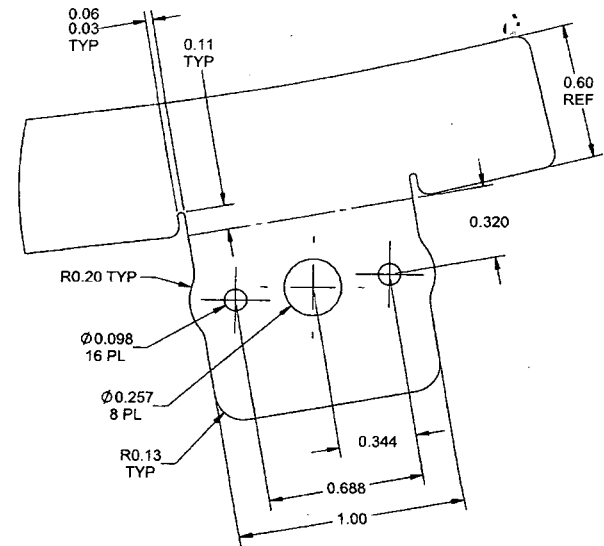
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action<br>Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

34264



**D4541-7 BRACKET**



**DETAIL G**  
TYP TAB DETAIL  
SCALE 4X

- NOTES:**
- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.04 lbs
  - 8) PROFILE PER DRAWING FILE "D4541-7-REVC.DXF"

|            |          |  |              |
|------------|----------|--|--------------|
| DESIGN     | g        | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |              |
| DRAWN      | g        |  |              |
| CHECKED    | ASS      | DRAWING NO. <b>D4541</b>   | REV. C       |
| MFG. APPR. |          |  | SHEET 7 OF 7 |
| APPROVED   |          | TITLE  | SCALE        |
| DE APPR.   |          | <b>BRACKET</b>   | NTS          |
| DATE       | 12.04.20 | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

